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(GB). **MCLEAN, Robert, Andreas** [CA/GB]; Brindles, Ufford Place, Ufford, Woodbridge, Suffolk IP13 6DR (GB).

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(72) Inventors; and

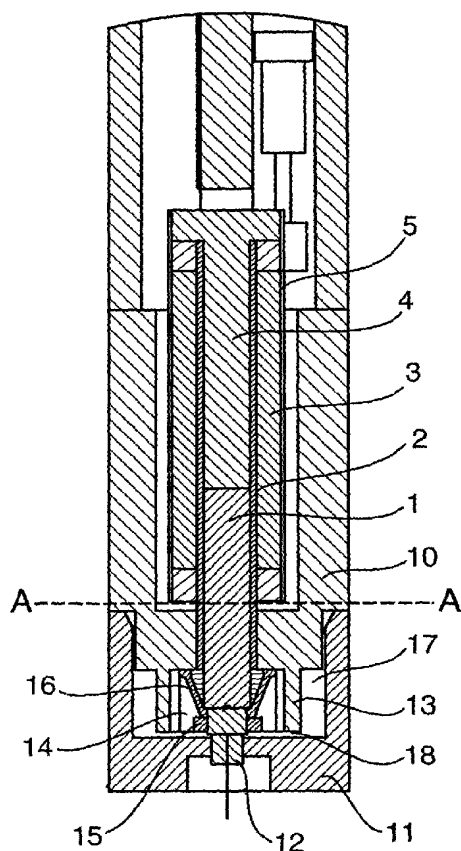
(75) Inventors/Applicants (for US only): **Hornsnell, David, Andrew** [GB/GB]; 3 Perne Road, Cambridge CB1 3RX (GB). **TOMLIN, Matthew, Brian** [GB/GB]; 4 Lingholme Close, Cambridge CB4 3HW (GB). **LECHEHEB, Ammar** [GB/GB]; 3 The Paddock, Harston, Cambridge CB2 5PR (GB). **PRIME, Oliver, John** [GB/GB]; 5 Lingholme Close, Cambridge CB4 3HW (GB). **FOX, Michael, John** [GB/GB]; Silverstones, Church Lane, Seaton, Rutland LE15 9HR (GB). **BATES, Christopher, Michael** [GB/GB]; Boughton Spinney, Kettering NN16 9JP (GB).

(71) Applicants (for all designated States except US): **WILET INTERNATIONAL LIMITED** [GB/GB]; 3 Cronin Road, Weldon South Industrial Estate, Corby NN18 8AQ

(74) Agents: **MITCHELL, Richard, J.** et al.; c/o Marks & Clerk, 280 Slater Street, Suite 1800, Ottawa, Ontario K1P 1C2 (CA).

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(54) Title: SOLENOID VALVE



(57) Abstract: The invention relates to a solenoid valve made using certain materials which is capable of operation at high frequencies and which can be made as a compact unit. The plunger (1) is made from an electromagnetic material having a saturation flux density greater than 1.2 Teslar preferably more than 1.6 Teslar, the bore leading from the valve head chamber (14) to the nozzle orifice (12) has a length to diameter ratio of less than 5:1 preferably between 2:1 and 4:1 and the nozzle orifice (12) has a diameter of 80 micrometer or less. The invention also relates to method for operating a drop on demand ink jet printer incorporating such a valve.



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